



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**HC-2205**

Component  
**Hydraulic System**

Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0873368</b>	WC0720475	---
Sample Date		Client Info		<b>02 Jan 2024</b>	20 Sep 2022	---
Machine Age	hrs	Client Info		<b>7825</b>	6950	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Not Changed</b>	N/A	---
Filter Changed		Client Info		<b>Changed</b>	N/A	---
Sample Status				<b>NORMAL</b>	ATTENTION	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>1</b>	1	---
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	1	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>75	<b>2</b>	2	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

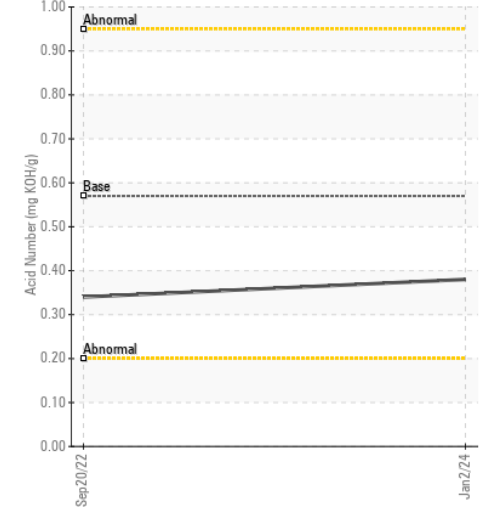
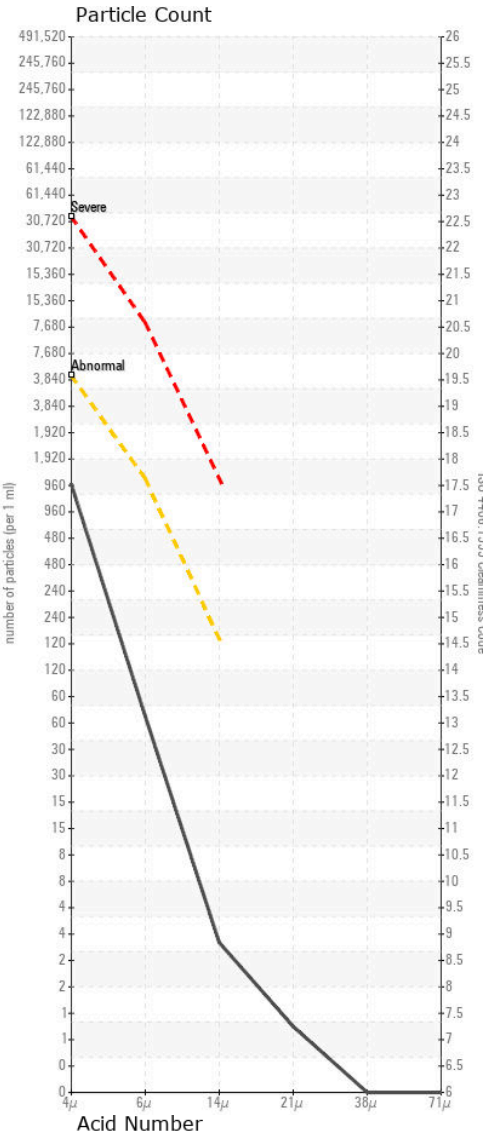
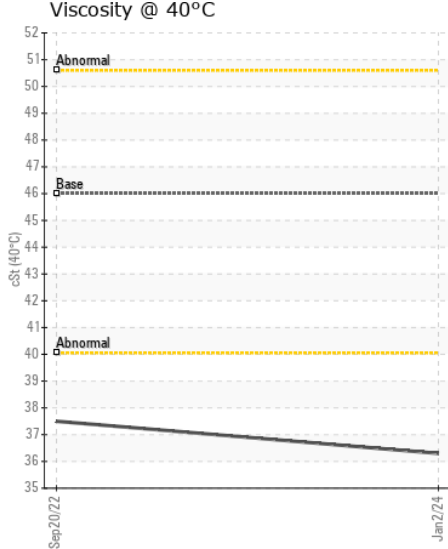
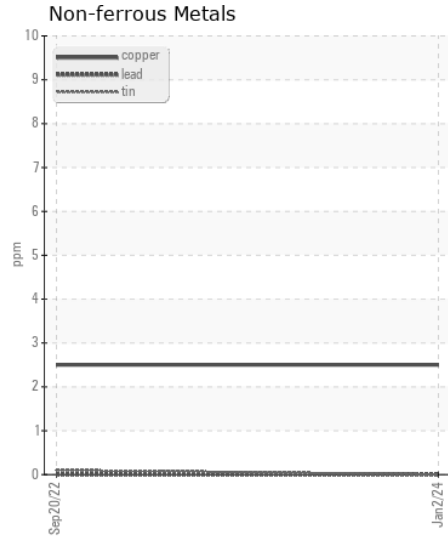
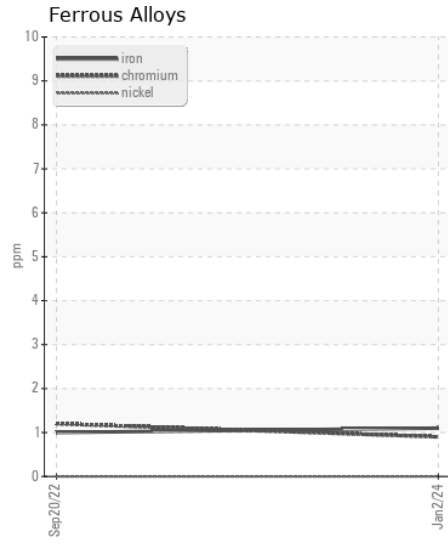
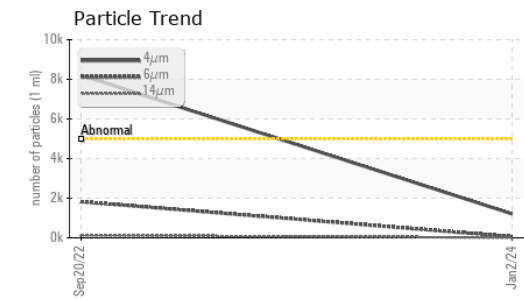
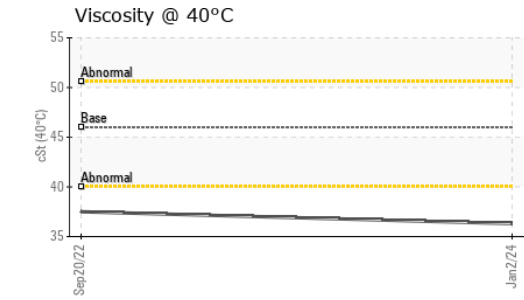
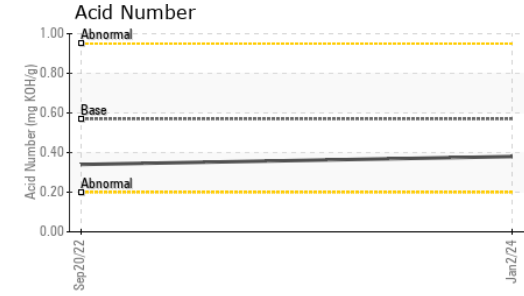
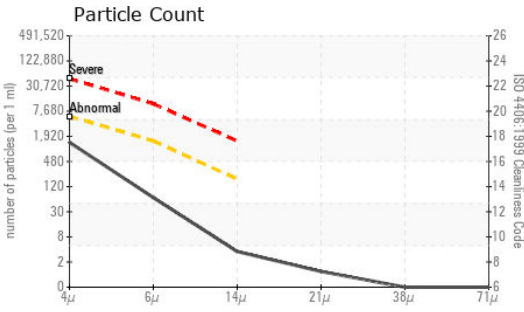
The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Water		WC Method	>0.1	<b>NEG</b>	NEG	---
Particles >4µm		ASTM D7647	>5000	<b>1207</b>	▲ 8211	---
Particles >6µm		ASTM D7647	>1300	<b>58</b>	▲ 1819	---
Particles >14µm		ASTM D7647	>160	<b>3</b>	128	---
Particles >21µm		ASTM D7647	>40	<b>1</b>	35	---
Particles >38µm		ASTM D7647	>10	<b>0</b>	1	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>17/13/9</b>	▲ 20/18/14	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	---

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>0</b>	0	---
Boron	ppm	ASTM D5185m	5	<b>1</b>	0	---
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	5	<b>0</b>	<1	---
Manganese	ppm	ASTM D5185m		<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m	25	<b>0</b>	7	---
Calcium	ppm	ASTM D5185m	200	<b>83</b>	115	---
Phosphorus	ppm	ASTM D5185m	300	<b>309</b>	390	---
Zinc	ppm	ASTM D5185m	370	<b>405</b>	504	---
Sulfur	ppm	ASTM D5185m	2500	<b>1823</b>	2541	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.38</b>	0.34	---
Visc @ 40°C	cSt	ASTM D445	46	<b>36.3</b>	37.5	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0873368 **Received** : 30 Jan 2024  
**Lab Number** : 06073825 **Diagnosed** : 31 Jan 2024  
**Unique Number** : 10855916 **Diagnostician** : Angela Borella  
**Test Package** : CONST

**BUCKNER HEAVY LIFT**  
 4732 NC 54 EAST  
 GRAHAM, NC  
 US 27253-9215  
 Contact: MICHAEL LAWSON  
 michael@bucknercompanies.com  
 T: (336)376-8888  
 F: (336)376-4090

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)